

Pregnancy weight gain = big baby? No, says study

BY GRACE CHUA

PUTTING on more weight during pregnancy does not necessarily mean that the baby will be bigger, according to the preliminary findings of an ongoing study, the first of its kind in Singapore and the region.

Instead, there are ethnic differences: While Malay mothers-to-be seemed to put on the most weight, Chinese mothers had the biggest babies, said Associate Professor Chong Yap Seng of National University Hospital and the Yong Loo Lin School of Medicine at the National University of Singapore, who leads the study.

But the reasons are not yet clear, he said, as research is still in a very early stage.

The Growing Up In Singapore Towards Healthy Outcomes (Gusto) study seeks to understand how pregnancy and early childhood environments can affect children's risk of de-

veloping obesity and diseases such as Type 2 diabetes.

For example, other studies have found that poor nutrition during pregnancy often leads to babies being born small, but those same children are more likely to get fat and suffer from metabolic illnesses later in life.

The Gusto study tracks about 1,200 mothers. But only about 500 babies have been born to them to date, with the last batch of infants due to be delivered next April.

Prof Chong shared his team's preliminary findings at a symposium yesterday.

Besides the weight-gain data, the study showed women here appear to have a higher rate of gestational diabetes than was thought, based on a small sample of data, said Prof Chong.

Gestational diabetes is a condition where pregnancy hormones affect insulin resistance and result in high blood sugar.



Ms Mislia Supar, seen here with her son at home, is one of the 1,200 mothers in the Gusto study. ST PHOTO: RAJ NADARAJAN

According to the study, about 18 per cent of the women were found to have the condition. And more than a fifth of Chinese women in the study had gestational diabetes, though in the general population, only 7 per cent to 8 per cent of Chinese have the disease.

Prof Chong said more work is needed to understand the differences.

The Gusto study is part of the \$25 million Developmental Origins: Singapore (DevOS) programme announced in late 2008.

The only one of its kind in the region, the programme will collect vital data on metabolic diseases, which are on the rise among Asians. Most such research comes from the West.

DevOS is one of five flagship translational and clinical research programmes which examine gastric cancer, eye disease, mental health, infectious diseases and human development. The schemes, funded by the National Research Foundation, "translate" science in these areas from basic research to clinical applications.

Prof Chong said his team has also begun measuring infants' attention to novel images and sounds, among other neurocognitive measures. "We want to go beyond metabolic diseases into all development," he said.

The neurocognitive work will help, among other things, uncover better predictors of attention deficit disorder. Currently, there is no way to predict which children are at risk, or to detect the disorder before the age of three.